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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,972	12/26/2001	Masayuki Naya	Q66572	7826

7590

08/28/2003

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EXAMINER

STAFIRA, MICHAEL PATRICK

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 08/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,972

Applicant(s)

NAYA, MASAYUKI

Examiner

Michael P. Stafira

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Response dated 6/23/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over EPO 11326194 in combination with Yee et al. ('073) and in further view of Kempen ('011).

Claims 1-3

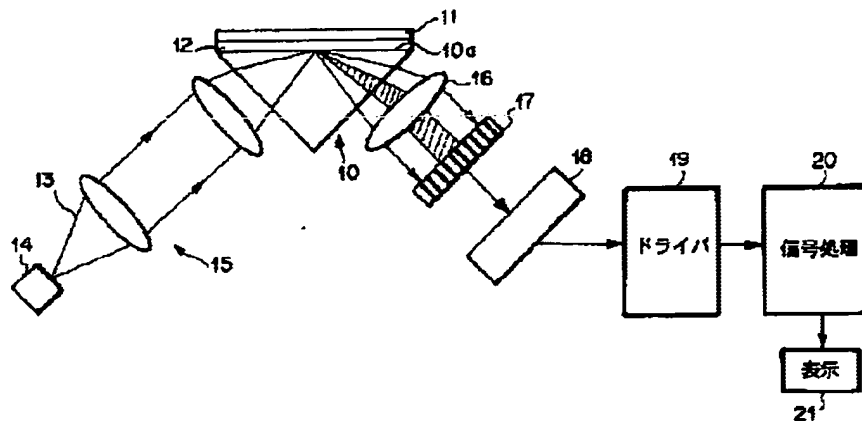
The reference of EPO 11326194 is considered prior art since it has the same inventive entity, but was filed a whole year (11/26/1999-11/26/2000) before the claimed prior foreign application 12/25/2000.

EPO 11326194 discloses all the elements of a dielectric block (Ref. 10), a light source (Ref. 14) for emitting a light beam, an optical system for making the light beam enter the dielectric block at various angles of incidence so that the conditions for total internal reflection is satisfied at an interface between the dielectric block and the film layer, photodetection means

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(Ref. 17) for detecting the attenuated total reflection by measuring the intensity of the light beam satisfying total internal reflection at the interface (See English Abstract).

EPO 11326194 further discloses a metal film and thin film formed on the surface of the dielectric block, for placing the sample (See Fig. Ref.12).



EPO 11326194 substantially teaches the claimed invention except that it does not show a cladding layer formed on a surface of said dielectric block. Yee et al. ('073) shows that it is known to provide a cladding layer formed on a surface of said dielectric block (Col. 3, lines 61-67) for a surface plasmon resonance sensor. It would have been obvious to combine the device of EPO 11326194 with the cladding layer of Yee et al. ('073) for the purpose of providing total internal reflection along the length of the dielectric block.

EPO 11326194 substantially teaches the claimed invention except that it does not show a semiconductor light emitting element that emits light by super radiance is employed as the light source. Kempen ('011) shows that it is known to provide a semiconductor light emitting element that emits light by super radiance is employed as the light source (Col. 5, lines 11-16) for an surface plasmon apparatus. It would have been obvious to combine the device of EPO 11326194

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with the semiconductor light source of Kempen ('011) for the purpose of providing very high contrast readout from the sensor which increasing the reliability the apparatus.

EPO 11326194 in combination with Yee et al. ('073) substantially teaches the claimed invention except that it does not show a semiconductor light emitting element that emits light by super radiance is employed as the light source. Kempen ('011) shows that it is known to provide a semiconductor light emitting element that emits light by super radiance is employed as the light source (Col. 5, lines 11-16) for an surface plasmon apparatus. It would have been obvious to combine the device of EPO 11326194 in combination with Yee et al. ('073) with the semiconductor light source of Kempen ('011) for the purpose of providing very high contrast readout from the sensor which increasing the reliability the apparatus.

Response to Arguments

1. Applicant's arguments, see Response, filed June 23, 2003, with respect to the rejection(s) of claim(s) 1-3 under USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of EPO 11326194 in combination with Yee et al. ('073) and Kempen ('011).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 703-308-4837. The examiner can normally be reached on 4/10.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on 703-308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Michael P. Stafira
Primary Examiner
Art Unit 2877

August 12, 2003